ABSTRACT

The present invention is directed to a fuel cell system with various features for optimal operations of an electronic device, a battery charger or a fuel refilling device. The fuel cell system includes an information storage device associated with the fuel supply, pump and/or refilling device. The information storage device can be any electronic storage device including, but not limited to, an EEPROM or a PLA. The information storage device can include encrypted information. The information storage device can include software code for confirming the identification of the cartridge before operation of the electronic device and/or refilling device. The information storage device can include instructions for a hot swap operation to shut down properly when the fuel supply is ejected while the electronic device is in operation. The present invention is also directed to system architecture for a fuel cell system that utilizes information storage devices. The system architecture may have flow regulators, which include a regulating valve.